

4-2 Radicals – Adding and Subtracting

Name: _____

Time> Start: _____ Finish: _____ Total Time = _____

Simplify each radical expression. Show your work on a separate piece of paper if necessary.

_____ 1. $2\sqrt{3} + 5\sqrt{3}$

_____ 2. $\sqrt{8} + 5\sqrt{2}$

_____ 3. $\sqrt{3} + 2\sqrt{5} + 4\sqrt{3} + 9\sqrt{5}$

_____ 4. $3a\sqrt{7} + 8a\sqrt{7} - 4a\sqrt{7}$

_____ 5. $6\sqrt{3ab} - 4\sqrt{3ab}$

_____ 6. $\sqrt{8a^5} + 3a\sqrt{2a^3}$

_____ 7. $\sqrt{20a} + \sqrt{45a}$

_____ 8. $4\sqrt[3]{ab} + 5\sqrt[3]{ab}$

_____ 9. $\sqrt[3]{40} + \sqrt[3]{135}$

_____ 10. $5\sqrt[4]{80} + \sqrt[3]{16} + 3\sqrt[4]{32}$

_____ 11. $a^2\sqrt{18b^3} + b\sqrt{8a^4b}$

_____ 12. $2\sqrt{20ab^4} + b\sqrt{45ab^2}$

_____ 13. $\sqrt{27} + \sqrt{8} + \sqrt{12} - \sqrt{50}$

_____ 14. $b\sqrt{75a} - \sqrt{12ab^2}$

_____ 15. $5\sqrt[3]{2} - \sqrt[3]{16}$